

Amended  
Claims

- 1) A monoclonal antibody and a fragment thereof, respectively, characterized by an exchange of cysteine for another polar amino acid at position H100A of the OKT3 antibody known under this name.
- 2) The monoclonal antibody according to claim 1, characterized in that the polar amino acid is serine.
- 3) The monoclonal antibody according to claim 1 or 2, characterized in that it includes the sequence indicated in figure 2.
- 4) A method for the production of the monoclonal antibody or fragment thereof according to any one of claims 1 to 3, characterized by the steps of:
  - a) obtainment of mRNA from freshly subcloned hybridoma cells of OKT3 and transcription into cDNA,
  - b) amplification of the DNA coding for the variable domains of the light and heavy chains by means of PCR using suitable primers,
  - c) cloning of the DNA obtained in b) into a vector adapted for site-specific mutagenesis as well as introduction of the desired mutation using suitable primers,
  - d) insertion of the mutated DNA obtained in c) in an expression vector and expression in a suitable expression system.

- 5) The method according to claim 4, wherein the primers used in step b) are Bi5, Bi8, Bi4 and Bi3f.
- 6) The method according to claim 4 or 5, wherein the vector used in step c) is pCR-Skript SK(+).
- 7) The method according to any one of claims 4 to 6, wherein the primer SK1 5'-GTAGTCAAGGCTGTAATGATCATC is used in step c).
- 8) The method according to any one of claims 4 to 7, wherein the expression vector used in step d) is pHOG21.
- 9) The method according to any one of claims 4 to 8, wherein the expression takes place in XL1-Blue *E. coli* cells.
- 10) Use of the monoclonal antibody or fragment thereof according to any one of claims 1 to 3 for reducing or eliminating a transplant rejection by an organ transplant recipient.
- 11) Use of the monoclonal antibody or fragment thereof according to any one of claims 1 to 3 for tumor diagnosis or tumor treatment.